

ABSTRACT

A rotor assembly for an alternator includes an electrical wire defining an excitation winding. A first pole piece and a second pole piece each have a generally circular body defining an axis of rotation and an outer radial periphery. A plurality of pole fingers are spaced radially about and extend axially from the outer radial periphery of each pole piece parallel to the axis of rotation. Each pole piece includes a plurality of mounting surfaces spaced radially about the outer radial periphery between the pole fingers. A plurality of permanent magnets are positioned on the mounting surfaces. A plurality of covers include tabs extending therefrom and are adapted to substantially encase one of the permanent magnets. The mounting surfaces of the first and second pole pieces include ribs which are adapted to engage the tabs to secure the covers to the mounting surfaces.